

**REMARKS**

Reconsideration of this application in certain regards and as amended, is respectfully requested. The following remarks are responsive to the Office Action mailed November 13, 2009.

Claims 1-9 and 11 and amended and Claims 12-15 are canceled. New dependant Claims 16-25 are added. No new matter is presented by these changes to the claims. Support may be found in FIGS. 4-7 and paragraphs [0049] through [0062] of U.S. Pub. No. 2007/0276480.

Claims 7 and 8 are allowable, but objected to as being dependent upon a rejected parent claim. Claims 7 and 8 are rewritten in dependant claim format. Removal of the objection to these claims is requested. The Title is objected as being non-descriptive. The Title is amended. Removal of this objection is requested. And the specification is objected to at page 3, line 4. The specification is amended. Removal of this objection is requested.

**Rejections under 35 U.S.C. 112**

Claim 9 is rejected for lacking structural language supporting the property of retrograde flow. Claim 9 is amended and complies with Section 112. Withdrawal of the rejection is requested.

**Rejections under 35 U.S.C. 102**

Claims 1-6 and 9 stand rejected under 35 U.S.C. 102(b), as being anticipated by *Wampler* (US Patent No. 5,840,070).

*Wampler* describes a centrifugal pump having a pump rotor contained within a housing. At one end the rotor has blades. The rotor is suspended within the housing by magnets. Claim 1 includes the following features:

the impeller includes a central shaft, a support ring, and a plurality of spaced apart blades extending between the support ring and the central shaft, wherein the support ring forms at least two surfaces extending at an angle to an axis of rotation for the impeller to form hydrodynamic bearing surfaces and a channel disposed between the at least two surfaces.

*Wampler* is missing the above aspects of the impeller described above, such as the feature of a support ring and bearing surfaces formed on the support ring. Anticipation under 35 U.S.C. § 102 requires that each limitation of a claim is found in a single reference either expressly or inherently. See *Perricone v. Medicis Pharm. Corp.*, 432 F.3d 1368, 77 USPQ2D 1321 (Fed. Cir. 2005). Since *Wampler* does not disclose every feature in Claim 1, it cannot anticipate Claim 1, nor any of the claims depending from Claim 1. Withdrawal of the rejections under 35 U.S.C. § 102 of Claims 1-6 and 9 is requested for this reason. Claim 24, which depends from Claim 1, is also patentable over *Wampler*, at least because it depends from Claim 1.

Claims 11-15 stand rejected under 35 U.S.C. 102(b), as being anticipated by *Watterson* (US Patent No. 6,227,797). Claims 12-15 are canceled. *Watterson* shows both a centrifugal flow pump (FIG. 1) and an axial flow pump (FIG. 6). Claim 11, however, recites the feature of "blades having a decreasing pitch to straighten blood flowing out of the housing". *Watterson* does not disclose this feature. **Moreover, this feature of Claim 11 is also found in allowable Claim 7.** Withdrawal of the rejections under 35 U.S.C. § 102 of Claim 11 is requested for this reason. New Claims 16-22 and Claim 25, dependant from Claim 11, are allowable at least because they depend from Claim 11.

As demonstrated above, all pending claims in this application are clearly in condition for allowance. Applicant therefore respectfully asks that all standing rejections be withdrawn and a Notice of Allowance issue for this case.

In light of the foregoing remarks, this application is considered to be in condition for allowance, and early passage of this case to issue is respectfully requested. If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 07-1850.

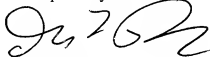
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Respectfully submitted,



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